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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
RASHIDIAN, MOHAMMAD M	
ART UNIT	PAPER NUMBER
2624	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/769,769	ONNO ET AL.	
	Examiner	Art Unit	
	MEHDI RASHIDIAN	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *February 22, 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *13-22,24 and 26* is/are withdrawn from consideration.

5)☐ Claim(s) *1-12,23 and 25* is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 13-22, 24, and 26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on February 22, 2008.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 23, 25 are rejected under 35 U.S.C. 101 because the claims contain a program, which is non-statutory subject matter because a program must be recited as "A computer-readable medium encoded with a computer program" in order to be considered statutory subject matter. Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any

structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Regarding **claim 23**, "an information storage means which can be read by a computer or a microprocessor comprising code instructions of a computer program for executing the steps of the method according to Claim 1", the examiner suggests amending claim as such "a computer readable medium storing a computer program when executed can be read by a computer or a microprocessor comprising code instructions of a computer program for executing the steps of the method according to Claim 1", or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Regarding **claim 25** "a computer program which can be loaded into a programmable apparatus, wherein it contains sequences of instructions or portions of software code for implementing the steps of the method according to Claim 1, when this computer program is loaded into and executed by the programmable apparatus" , the examiner suggests "a computer readable medium storing a computer program when executed

can be read by a computer or a microprocessor comprising code instructions of a computer program for executing the steps of the method according to Claim 1", or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Berthelot, Bertrand, et al (EP 0 982 931 A1) henceforth referred to as Berthelot.

Regarding **claim 1**, Berthelot teaches, a method of forming a compressed transcoded digital image signal from a compressed original digital image signal which comprises digital data organized in blocks, (abstract, figs. 1 and 4, ¶ 0001 - ¶0011),

- the compression of the original signal comprising at least one step of spatio-frequency transformation of this signal and a step of coding the data blocks of said transformed signal, wherein the method comprises the following steps: - selecting a data block in one of the compressed signals, (fig. 5 and 6, ¶ 0064 - ¶0072),

- identifying, in the other compressed signal, a so-called dual data block which corresponds to the data block selected having regard to a given geometric transformation applied to this block, (¶ 0073 - ¶0079),

- decoding the data block belonging to the compressed original signal, - applying the given geometric transformation to the data block thus decoded, (¶ 0089 - ¶0099),

- coding the geometrically transformed data block, (fig. 5 and 6, ¶ 0064 - ¶0072),

- inserting the first data block thus coded in the compressed transcoded image signal at the position of its dual block, (¶ 0146 - ¶0155),

Regarding **claim 2**, Berthelot teaches , the method according to Claim 1, wherein the selection of a block is made in the compressed transcoded digital image signal, (abstract, figs. 1 and 4, ¶ 0001 - ¶0011).

Regarding **claim 3**, Berthelot teaches, the method according to Claim 1, wherein the selection of a block is made in the compressed original digital image signal, (¶ 0008 - ¶0011).

Regarding **claim 4**, Berthelot teaches, the method according to **Claim 1**, wherein the compressed transcoded digital image signal is formed progressively as each coded data block is inserted in this signal, (figs. 1 and 4, ¶ 0001 - ¶0011).

Regarding **claim 5**, Berthelot teaches, The method according to **Claim 1**, wherein the given geometric transformation is selected from amongst a set of transformations comprising a vertical axis reflection SV, a horizontal axis reflection SH, a transposition TR and a combination of transformations formed from at least two of the aforementioned three transformations SV, SH, TR. (abstract, figs. 5 and 6, table 1, ¶ 0081 - ¶0088).

Regarding **claim 6**, Berthelot teaches, the method according to **Claim 1**, wherein, when the compression of the original signal comprises, prior to the coding, a step of decomposition of said signal into frequency sub-bands, said method comprises a step of identifying the frequency sub-band to which the dual data block which depends on the given geometric transformation belongs, (figs. 1 and 4, ¶ 0001 - ¶0011).

Regarding **claim 7**, Berthelot teaches, the method according to **Claim 5**, wherein the compression of the original signal comprises, prior to the coding, a step of decomposition of said signal into frequency sub-bands, said method comprises a step of identifying the frequency sub-band to which the dual data block which depends on

the given geometric transformation belongs, and when the geometric transformation applied to the decoded data block involves a transposition TR, if the data block of the first compressed signal belongs to a frequency sub-band LH having low-frequency coefficients in a first direction and high-frequency coefficients in a second direction, then the dual data block of the second compressed signal belongs to the frequency sub-band (HL) having high-frequency coefficients in the first direction and low- frequency coefficients in the second direction, and vice-versa, (abstract, figs. 5 and 6, table 1, ¶ 0081 - ¶0088).

Regarding **claim 8**, Berthelot teaches, the method according to **Claim 5**, wherein, when the given geometric transformation is selected from amongst a subset of transformations comprising a transposition TR, a combination of a transposition and a vertical axis reflection TR o SV, a combination of a transposition and a horizontal axis reflection TR o SH, a combination of a transposition, a horizontal axis reflection and a vertical axis reflection TR o SH o SV, said transformation is applied an even number of times, (abstract, figs. 5 and 6, table 1, ¶ 0081 - ¶0088).

Regarding **claim 9,** Berthelot teaches, the method according to **Claim 1**, wherein the identification of the dual data block in the other compressed signal consists of seeking, in this signal, the position which the data block corresponding to the first compressed signal would have by applying the given geometric transformation to it, (abstract, figs. 5 and 6, table 1, ¶ 0081 - ¶0088).

Regarding **claim 10**, Berthelot teaches, the method according to **Claim 1**, wherein the selection, identification and decoding steps are performed using at least one header of the compressed original digital image signal and which comprises the various parameters characterizing the compressed image, (abstract, figs. 5 and 6, table 1, ¶ 0081 - ¶0088).

Regarding **claim 11**, Berthelot teaches, the method according to **Claim 10**, wherein it comprises a step of forming at least one header of the compressed transcoded digital image signal according to the geometric transformation applied, (abstract, figs. 5 and 6, table 1, ¶ 0081 - ¶0088).

Regarding **claim 12**, Berthelot teaches, the method according to **Claim 1**, wherein the steps of selecting, identifying, decoding, transforming and coding the data blocks are performed resolution level by resolution level of the compressed transcoded digital image signal, (abstract, figs. 5 and 6, table 1, ¶ 0081 - ¶0088).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MEHDI RASHIDIAN whose telephone number is

(571)272-9763. The examiner can normally be reached on Mon-Thurs 9:00AM to 8:00PM, ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mehdi Rashidian
March 26, 2008

/Samir A. Ahmed/
Supervisory Patent Examiner, Art Unit 2624